

REMARKS

By this Amendment, an Abstract is submitted on a separate sheet of paper and the claims are amended merely to clarify the recited subject matter. Claims 1-8 are pending.

The Office Action rejected claims 1, 3-5 and 7-8 under 35 U.S.C. §103(a) as being unpatentable in view of Love et al. (U.S. 5,363,412; hereafter "Love") and Birchler et al. (U.S. 5,440,582; hereafter "Birchler"). Claims 2 and 6 were rejected under 35 U.S.C. §103(a) based on Love, Birchler and LaRosa et al. (U.S. 5,323,421; hereafter "LaRosa").

Applicant traverses the prior art rejections because no combination of the cited prior art teaches or suggests all the features of the claimed invention. For example, no combination of the cited prior art discloses, teaches or suggests the claimed method including "comparing the error estimate representing the erroneousness of the signal path generated with a predetermined threshold value; and recognizing the reception of the interfering signal if the error estimate is greater than the predetermined threshold value," as recited in independent claim 1 and its dependent claims. Similarly, no combination of the cited prior art references discloses, teaches or suggests equipment for detecting an interfering signal in a time division multiple access (TDMA) radio receiver, wherein the equipment is "arranged to determine an error estimate representing the erroneousness of the signal path generated and to compare the error estimate representing the erroneousness of the signal path generated with a predetermined threshold value, and the equipment is also arranged to recognize the reception of the interfering signal if the error estimate is greater than the predetermined threshold value," as recited in independent claim 5 and its dependent claims.

Birchler merely presents a method and apparatus for determining a level of usability of a received signal, which includes a summation of a desired portion and an undesired portion. The desired portion includes an original transmitted signal, modified in amplitude and phase, and the undesired portion includes noise and interference. According to Birchler, a receiver extracts a representation of the desired portion from the received signal and utilizes it to obtain a representation of the received signal's undesired portion. The receiver then calculates the average power contained in each portion and forms the ratio of these two powers. This ratio, which is commonly referred to as the carrier to interference plus noise ratio, or $C/(I+N)$, provides an indicia of the usability of the received signal. Thus, Birchler explicitly teaches to use a power ratio of the desired portion of the received signal and the undesired portion of the received signal for the determination of the usability of the received signal.

Therefore, Birchler actually teaches away from the present invention, which uses an error estimate representing the erroneousness of the signal path generated for recognizing the reception of an interfering signal. The claimed invention is based on the novel and inventive idea of determining an error estimate, which represents the erroneousness of a generated signal path, which corresponds to a TDMA timeslot, or a portion of the TDMA timeslot, of the received signal. The error estimate is compared with a predetermined threshold value, and, based thereon, it is detected whether the received signal is an interfering signal.

Love fails to remedy the deficiencies of Birchler because, even assuming (for argument's sake only) a person skilled in the art would have been motivated to combine the teachings of Love and Birchler, the teachings of Birchler would control and the combined product would merely use a ratio of the desired portion of the received signal and the undesired portion of the received signal for the determination of the usability of the received signal.

LaRosa similarly fails to remedy the deficiencies of Birchler and Love because LaRosa is merely directed to particulars of a conventional channel quality estimation scheme.

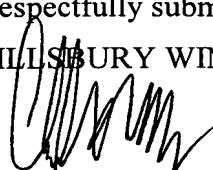
Therefore, the combined teachings of Birchler, Love and LaRosa fail to teach or suggest the claimed invention including comparison of an error estimate representing the erroneousness of the signal path generated with a predetermined threshold value and recognition of the reception of the interfering signal if the error estimate is greater than the predetermined threshold value, as recited in all the pending claims.

All objections and rejections having been addressed, Applicant requests issuance of a notice of allowance indicating the allowability of all pending claims. If anything further is necessary to place the application in condition for allowance, Applicant requests that the Examiner contact Applicant's undersigned representative at the telephone number listed below.

HUTTUNEN -- 09/700,931
Client/Matter: 060258-0274039

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
PILLSBURY WINTHROP LLP



CHRISTINE H. MCCARTHY
Reg. No. 41844
Tel. No. (703) 905-2143
Fax No. (703) 905-2500

Date: April 5, 2004
P.O. Box 10500
McLean, VA 22102
(703) 905-2000